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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/802,719 | 03/18/2004 | Hiroaki Nasu | Q80238 | 5043 |
| 23373 | 7590 | 08/16/2005 | EXAMINER | |
| SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | SANTIAGO, MARICELI | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2879 | |
| DATE MAILED: 08/16/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/802,719

Applicant(s)

NASU ET AL.

Examiner

Mariceli Santiago

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/18/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-27 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25, 26 and 29 is/are rejected.
- 7) ☒ Claim(s) 27 and 30-32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Response to Amendment***

The Amendment, filed on July 18, 2005, has been entered and acknowledged by the Examiner.

Cancellation of claims 1-24 and 28 has been entered.

Claims 25-27 and 29-32 are pending in the instant application.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 25 and 26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,236,148. Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reasons.

| U.S Application SN 10/802,719 | U.S. Patent No. 6,236,148 |
|--|---|
| Claim 25 states a spark plug comprising a central electrode; an insulating member disposed on the outside of the central electrode; a main metal shell disposed on the outside of the insulating member, the main metal shell having a | Claim 3 states a spark plug comprising a central electrode; an insulating member disposed on the outside of the central electrode; a main metal shell disposed on the outside of the insulating member; and |

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| <p>base portion;</p> <p>a ground electrode disposed opposite to the central electrode such that a spark discharge gap is formed; and</p> <p>a ring-shaped gasket to be fitted to the base portion of the main metal shell,</p> <p>wherein a surface of the gasket is coated with a chromate film including trivalent chrome, and</p> <p>wherein the chromate film contains chrome components in which a ratio of the trivalent chrome is 95% or more.</p> | <p>a ground electrode disposed opposite to the central electrode such that a spark discharge gap is formed;</p> <p>wherein the surface of the main metal shell is coated with a chromate film containing trivalent chrome by 95 wt % or more of contained chrome components, and</p> <p>further comprising a ring-shaped gasket to be fitted to the base portion of a joining thread portion formed on the outer surface of the main metal shell; wherein at least a portion of the gasket is coated with the chromate film.</p> |
| <p>Claim 26 states wherein the chromate film has a thickness of 0.2 μm to 0.5 μm.</p> | <p>Claim 3 states wherein the chromate film has a thickness of 0.2 μm to 0.5 μm.</p> |

Claims 25 and 29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent No. 6,768,249. Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reasons.

| U.S. Application SN 10/802,719 | U.S. Patent No. 6,768,249 |
|--|--|
| <p>Claim 26 states a spark plug comprising</p> <p>a central electrode;</p> <p>an insulating member disposed on the outside of the central electrode;</p> <p>a main metal shell disposed on the outside of the insulating member, the main metal shell having a base portion;</p> <p>a ground electrode disposed opposite to the central electrode such that a spark discharge gap is formed; and</p> <p>a ring-shaped gasket to be fitted to the base portion of the main metal shell,</p> <p>wherein a surface of the gasket is coated with a</p> | <p>Claim 9 states a spark plug comprising:</p> <p>a central electrode;</p> <p>an insulator provided outside the central electrode;</p> <p>a main metal shell provided outside the insulator;</p> <p>a ground electrode provided to oppose to the central electrode to define a spark discharge gap;</p> <p>and an annular gasket to be fitted around the basal end portion of a mounting threaded section formed on a peripheral surface of the main metal shell,</p> <p>wherein a surface of the main metal shell is coated with a complex chromate coat that contains a chromium component comprising at least 90 wt % of trivalent chromium, and at least a part of the</p> |

| | |
|---|---|
| chromate film including trivalent chrome, and wherein the chromate film contains chrome components in which a ratio of the trivalent chrome is 95% or more. | surface of the gasket being coated with the complex chromate coat. |
| Claim 29 states wherein the content of sodium components contained in said chromate film is 2 to 7 wt %. | Claim 9 states wherein the chromate film comprises at least a silicon component in an amount of 5 to 75 wt %. |

Allowable Subject Matter

Claims 27 and 30-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mariceli Santiago
Primary Examiner
Art Unit 2879